Claims

1. Use of a compound chosen from at least one of manno-oligosaccharides, caseinoglycomacropeptides (CGMP), methyl manno-oligosaccharides, chito-oligosaccharides, pectic oligosaccharides, galacto-oligosaccharides (GOS), curdlan (beta-1,3-glucan), sialyl-oligosaccharides, isomalto-oligosaccharides, oligogalacturonide, partially hydrolysed guar gum, gentio-oligosaccharides, arabino-oligosaccharides, pectin, lactose, lactulose, lactosucrose and long-chain isomalto-oligosaccharides for the manufacture of a nutritional or pharmaceutical composition for the inhibition of pathogen adhesion to mammalian cells, and/or for preventing, reducing or inhibiting the invasion and infection of mammalian cells by pathogen, in particular mammalian gut and/or intestinal epithelial cells.

2. Use of a compound chosen from at least one of manno-oligosaccharides, caseinoglycomacropeptides (CGMP), methyl manno-oligosaccharides, chito oligosaccharides, pectic oligosaccharides, galacto-oligosaccharides (GOS), curdlan (beta-1,3-glucan), sialyl oligosaccharides, isomalto-oligosaccharides, oligogalacturonide, partially hydrolysed guar gum, gentio oligosaccharides, arabino-oligosaccharides, pectin, lactose, lactulose, lactosucrose and long-chain isomalto-oligosaccharides for the manufacture of a nutritional or pharmaceutical composition for the prevention or treatment of acute or chronic pathogen-associated enteric disorders in a mammal, in particular gastroenteritis, ulcerative colitis, or diarrhoeal diseases, or for the prevention or treatment of pathogenic microflora proliferation in a mammal.

3. Use of a compound chosen from at least one of manno-oligosaccharides, caseinoglycomacropeptides (CGMP), methyl manno-oligosaccharides, chito-oligosaccharides, pectic oligosaccharides, galacto-oligosaccharides (GOS), curdlan (beta-1,3-glucan), sialyl oligosaccharides, isomalto-oligosaccharides, oligogalacturonide, partially hydrolysed guar gum, gentio oligosaccharides, arabino-oligosaccharides, pectin, lactose, lactulose, lactosucrose and long chain isomalto-oligosaccharides for the inhibition of pathogen adhesion to mammalian cells and/or for preventing, reducing or inhibiting the invasion and infection of mammalian cells, in particular gut and intestinal mammalian cells, by pathogen.

4. A method of preventing and/or treating acute or chronic pathogen-associated, e.g. bacteria-associated, enteric disorders in a mammal, in particular diarrhoeal diseases,

gastroenteritis or ulcerative colitis, said method comprising administering to said mammal a therapeutically effective amount of a compound chosen from at least one of manno-oligosaccharides, caseinoglycomacropeptides (CGMP), methyl manno-oligosaccharides, chito oligosaccharides, pectic oligosaccharides, galacto-oligosaccharides (GOS), curdlan (beta-1,3-glucan), sialyl oligosaccharides, pectin, lactose, lactulose, lactosucrose, isomalto-oligosaccharides, oligogalacturonide, partially hydrolysed guar gum, gentio oligosaccharides, arabino-oligosaccharides and long-chain isomalto-oligosaccharides.

5. Use according to any one of claims 1 to 3, or method according to claim 4, wherein the compound is chosen from at least one of manno-oligosaccharides, pectic-ligosaccharides, sialyl-oligosaccharides, chito-oligosaccharides, caseinoglycomacropeptide (CGMP), galacto-oligosaccharides (GOS), curdlan and partially hydrolysed guar gum.

6. Use or method according to claim 5, wherein the compound is chosen from at least one of caseinoglycomacropeptide (CGMP), chito oligosaccharides, pectic oligosaccharides, sialyl oligosaccharides and curdlan.

7. Use or method according to any one of claims 1 to 5, wherein the manno-oligosaccharide is chosen from at least one of alpha 1-2 manno-oligosaccharide, alpha 1-3 manno-oligosaccharide and alpha 1-6 manno-oligosaccharide.

8. A nutritional or pharmaceutical composition comprising at least one compound chosen from manno-oligosaccharides and/or methyl manno-oligosaccharides, in particular chosen from alpha 1-2 mannobioses, alpha 1-3 mannobioses, alpha 1-6 mannobioses, or methyl alpha manno-oligosaccharides.

9. A nutritional or pharmaceutical composition comprising at least one compound chosen from caseinoglycomacropeptides (CGMP), chito oligosaccharides, pectic oligosaccharides, curdlan (beta-1,3-glucan), sialyl oligosaccharides, isomalto-oligosaccharides, oligogalacturonide, gentio oligosaccharides, arabino-oligosaccharides and long-chain isomalto-oligosaccharides and a nutritionally or pharmaceutically acceptable excipient.

10. A nutritional or pharmaceutical composition according to claim 9 wherein the compound is chosen from at least one of chito oligosaccharides, pectic oligosaccharides, sialyl oligosaccharides and curdlan.

11. A screening method to test the anti-adhesive activity of an oligosaccharide which method comprises

a) adding oligosaccharide solution to cell monolayers of the human colonic cell line HT29 in triplicate wells,

b) adding an equal volume of bacterial culture,

c) washing of the cell layers after 2h at 37°C aerobic, 5% CO_2,

d) detaching cell layers with trypsin/EDTA solution,

e) enumerating bacteria by plate counting, and

f) comparing counts in wells with oligosaccharides to those without.